

Anaconda Montana May 10, 2018 Listening Session What we heard. Actions under Consideration.

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Agency for Toxic Substances and Disease Registry (ATSDR)

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Summary for the EPA Region 8 Administrator June 13, 2018 Denver, CO

Good evening, and welcome, everyone.

Introduce ourselves, the agency and the term "ATSDR."

ATSDR Objectives for Listening Session in Anaconda

Identify precisely health concerns that lead to call for a "Health Study." Deploy expertise from a variety of disciplines to assist community in formulating questions in a vocabulary consistent with public health practice.

ATSDR, Montana DPPHS, and Anaconda Deer Lodge DPH are working in partnership.

- Montana DPHHS is a COOP partner. Also, their state epidemiologist is best qualified to evaluate data from the state tumor registry.
- ATSDR and MT DPPHS have strong ties to the local health department, a partnership critical to long term success.



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Superfund gave EPA the responsibility for identifying, investigating, and cleaning up National Priorities List sites.

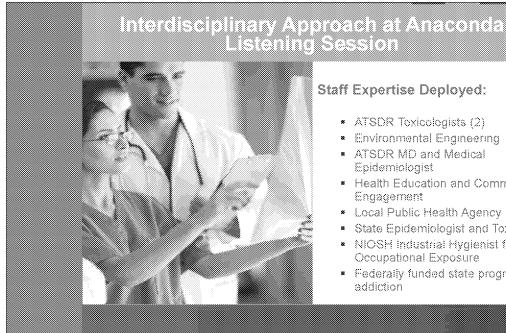
But it also mandated the creation of the Agency for Toxic Substances and Disease Registry (ATSDR) – a non regulatory, public health agency with key functions:

- Health assessments
- Tox profiles
- Epi Studies
- Registries and medical surveillance

I'll go over several of these functions throughout this presentation.

The Superfund Amendments and Reauthorization Act (SARA) of 1986 established the Superfund Research Program within the National Institute of Environmental Health Sciences (NIEHS) for the purpose of providing the critical basic information needed by EPA and ATSDR to ensure protection of human health and establish proper cleanup levels.

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Staff Expertise Deployed:

- ATSDR Toxicologists (2)
- Environmental Engineering
- ATSDR MD and Medical Epidemiologist
- Health Education and Community Engagement
- Local Public Health Agency
- State Epidemiologist and Toxicologist
- NIOSH Industrial Hygienist for Occupational Exposure
- Federally funded state program in



The type of work we do at ATSDR is not simple, we draw on expertise from many scientific fields. Just as an airport ground crew, with a variety of specialized expertise, works together to ensure the successful take-off and landing of an airplane, ATSDR brings together a variety of experts to ensure the public's health and safety. From toxicology to engineering to environmental medicine to epidemiology. And then we draw on years of expertise in health education and community engagement to make sure that the science is understandable to people dealing with environmental issues in their communities.

In my short time at ATSDR, I quickly recognized the many top notch scientists and Environmental Health professionals who go above and beyond to help people in communities.

Community Concerns Expressed

Participation: About 70

Key Community Health Concerns

- Pathways of continued exposure to arsenic:
 - 1. Dust from slag piles (air quality concern)
 - 2. Attic dust
 - 3. Uptake through game
 - 4. Gardening
 - 5. In water (municipal water line and private wells)
- · Increased Cancer Rates
- · Increase neurodegenerative diseases such as MS

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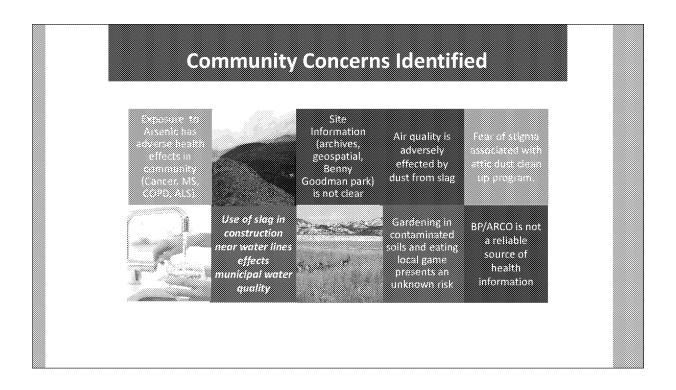
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Health assessors try to work with cleanup authorities/enforcement agencies from the beginning of our evaluation. We can offer input on work plans to make sure planned sampling will give data that can answer public health questions, and we also provide timely input into implications of data as it comes in – that is, if we see something of public health concern, we won't wait for a final report to alert authorities or take action.

ATSDR's involvement at a site can lend support to cleanup actions regulatory agencies want to undertake or may justify actions that have already been taken. Our evaluation may also lead to additional cleanup or changes in how a regulatory agency may plan their actions at a site. While we don't typically dictate the exact actions needed, we can comment on whether a planned action is protective of public health or if additional actions might be needed.

Sometimes there aren't enough data to evaluate an exposure pathway (for example, vapor intrusion into homes, consumption of fish from nearby waterways). ATSDR may recommend additional sampling so we can evaluate potential exposure pathways.

ATSDR can also perform public health evaluations at sites or in situations that don't fall under any specific regulatory authority and therefore might not get an adequate response. Our petition program is unique in that we have the ability to do evaluations at any site where exposure to hazardous substances may present a health risk.

An important part of our evaluation process, as we've discussed earlier, is our interaction with communities and local stakeholders about our work. We work to engage local and state health departments as partners (both through our cooperative agreement program and through work ATSDR leads from HQ).

ATSDR develops fact sheets and other materials to make sure residents and local leaders are aware of our findings, where they can go for more information, and what they can do to protect themselves from harmful exposures. We are available to answer people's questions about their exposure and our work, and while we don't provide medical exams or treatment, we can coordinate consultations between a resident's personal physician and regional occupational or children's environmental health specialists. We have also done both site-focused and general environmental trainings for local physicians and medical care providers as well as community groups.



Exposures to arsenic and lead at levels that cause adverse health effects

Potential Action:

ATSDR Exposure Investigation (collection of blood lead and urine arsenic with report) for Anaconda and Opportunity. Outreach to improve participation in long term PRP-funded biomonitoring for children. ATSDR MDs to work with local clinicians on best practices for environmental medicine.

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Dust from slag pile creates unhealthy levels of air contamination during wind events and during remediation

Potential Action:

Review previous air monitoring reports. Review dust suppression protocols for slag piles during construction to determine if they are protective. ATSDR summary report of findings. Consideration of air sampling; ATSDR design sampling plan with FPA

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Community Concern: Attic Dust clean ups will devalue (sic) homes

Potential Action:

Provide health education on risks; offer ATSDR letter consultations to estimate potential risk and provide exposure prevention strategy.

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Community Concern: Increased cancer in community

Potential Action:

Request state conduct cancer incidence review based on state tumor registry (though noting this data has limitations). Continued involvement of state epidemiologist.

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Increased levels neuro-degenerative compared to other communities.

Potential Action:

Health education at local level; fund academic partner to evaluate MS incidence (include Butte); encourage participation in ATSDR ALS registry.

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Municipal water quality adversely effected (at the tap) by the slag used to backfill trenches that hold drinking water lines.

Potential Action:

Review sampling protocol. Sampling at tap. ATSDR analysis, interpretation and reporting of these data.

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Community Concern: Overall health of community is poor.

Potential Action:

Advocate for renewed public health needs assessment at the county level (the last was in 2013) to evaluated issues such as access to mental health care, addiction, and aging,

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Uptake of arsenic through gardening and consumption of local game presents a health risk

Potential Action:

Health education in partnership with MSU
Agricultural Extension. Evaluate specific uptake of
specific fruits and vegetables grown in region.
Review of tissue samples (if any) previously taken
through SF program.

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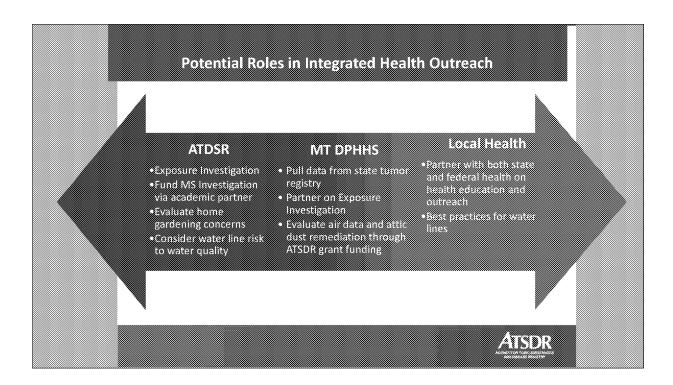
Confusion about where contamination is located. Unable to interpret letters explaining residential soil contamination

Potential Action:

Geospatial analysis in format easily understood by public. Health education and outreach. Capacity building at local level.

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People often wonder how the Public Health Assessment process relates to EPA's Risk Assessment process done through the Superfund program.

While there are many similarities in the data and methods used in the two types of assessments, there are important differences in the purpose, goals, and "format" of PHAs vs. RAs.

Presentation of the Plan to the Community

Next step in commitment to community.

- Present plan to community in public meeting format
- · Likely mid-summer
- Begin recruitment for Exposure Investigation
- · Renew Health Education in Anaconda

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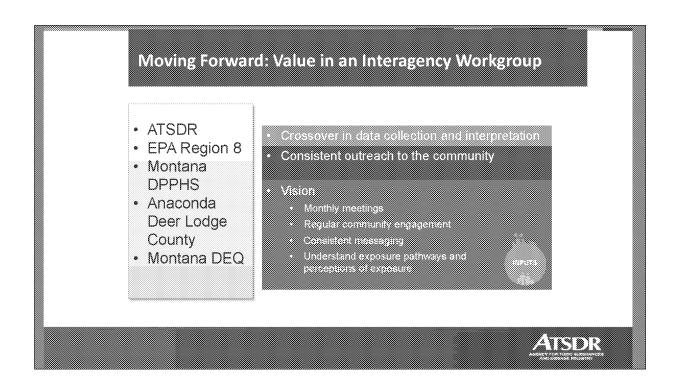
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We also use community input as we evaluate each exposure pathway. Typically we try to learn about community concerns from the beginning of our evaluation, but we continue to gather community input throughout our process.

Talking to people about their experiences at the site and their concerns helps us to do a better exposure assessment and address concerns as we prepare our report.

While community involvement is critical to our work, we don't have a one size fits all approach.

Later in the talk we'll give several examples of successful ATSDR/SRP collaborations focused on involving communities in health focused work at sites and addressing their questions and concerns.